Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL **FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 13

Application Number	10/614,905	
Filing Date	July 7, 2003	
First Named Inventor	Sergio Carmelo	
Art Unit	2836	
Examiner Name	Unassigned	•
Attorney Docket Number	CISCO-6920	

		<u> </u>	
		ENCLOSURES (check all that appl	(y)
Fee Transmittal F	orm	☐ Drawing(s)	After Allowance Communication to Group
Fee Attached	l	Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences
Amendment / Rep	ply	Petition	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final		Petition to Convert to a Provisional Application	Proprietary Information
Affidavits/dec	daration(s)	Power of Attorney, Revocation Change of Correspondence Address	Status Letter
Extension of Time	e Request	Terminal Disclaimers (3)	Other Enclosure(s) (please identify below):
Express Abandon	nment Request	Request for Refund CD, Number of CD(s)	Correction to Filing Receipt (2 pgs); copy of FR dated 10/3/2003 (2 pgs); copy of front page of
Information Disclo	osure Statement		spec filed 7/7/2003 (1 pg); Patent Practitioners List (2 pgs); and Copy of Original Dec filed on 7/7/2003 (5 pgs).
Certified Copy of Document(s)	Priority	Remarks	
Response to Miss Incomplete Applic			
Response to Parts under 3 1.52 or 1.53			
	SIGNA	TURE OF APPLICANT, ATTORNEY	, OR AGENT
Firm or Individual name	David B. Ritchie, Reg Thelen Reid & Priest		
Signature			
Date	11-4-2	2004	
	C	ERTIFICATE OF TRANSMISSION/M	MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name

Signature

Date This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to

process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Docket No.: CISCO-6920

IN FIE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Sergio Camerlo et al.

SERIAL NO.:

10/614,905

FILING DATE:

July 7, 2003

TITLE:

Delivering High-Current Power and Ground Voltages Using Top Side of Chip

Package Substrate

EXAMINER:

Unassigned

ART UNIT:

2836

Certificate of Mailing

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP: Office of Initial Patent Examination, P.O. Box

Date:

e: 115/2004

1450 Alexandria VA Signature: 1450, on the date printed below:

Beatrice Orozco

MAIL STOP: Office of Initial Patent Examination

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

REQUEST TO CORRECT FILING RECEIPT

It is respectfully submitted that the Filing Receipt for the above-identified patent application has an error.

The title is incorrect; the correct title is "Delivering High-Current Power and Ground Voltages Using Top Side of Chip Package Substrate" and not "Delivering High-Current Power adn Ground Voltages Using Top Side of Chip Package Substrate" as indicated on the Filing Receipt.

Please amend the Filing Receipt and appropriate records to reflect the correct title, in the referenced patent application. A copy of the Filing Receipt is enclosed. In addition, also enclosed is a copy of the first page of the specification for the above referenced patent application. Please note that it correctly lists the title.

Docket No.: CISCO-6920

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1698.

Dated: November _____, 2004

W

Respectfully submitted, THELEN READ & PRIEST LLP

David B. Ritchie Reg. No. 31,562

THELEN REID & PRIEST LLP P.O. Box 640640

San Jose, CA 95164-0640

Tel.: (408) 292-5800 Fax: (408) 287-8040





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS O DOE 1450 Alexandria, Virginia 22313-1450

32590-208

FILING OR 371 ART UNIT **FIL FEE REC'D** TOT CLMS APPL NO. ATTY.DOCKET NO DRAWINGS IND CLMS (c) DATE 10/614,905 07/07/2003 2836 1170 **CISCO-6920** 6 5

CONFIRMATION NO. 7936

David B. Ritchie Thelen Reid & Priest LLP P.O. Box 640640 San Jose, CA 95164-0640



FILING RECEIPT *OC00000010975257*

Date Mailed: 10/03/2003

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Sergio Camerlo, Cupertino, CA; Yida Zou, San Jose, CA; Luca Cafiero, Palo Alto, CA; Gary L. Myers, San Ramon, CA; Bobby Parizi, San Jose, CA; Hsing-Sheng Liang, San Jose, CA;

Assignment For Published Patent Application

Cisco Technology, Inc. a California Corporation;

Domestic Priority data as claimed by applicant

Date: 10/27/04 Reviewed By: _____ No Action Required: . Action Required: _____

If Required, Foreign Filing License Granted: 10/02/2003

Projected Publication Date: Request for Non-Publication Acknowledged

Non-Publication Request: Yes

Foreign Applications

Early Publication Request: No

and

Delivering high-current power and ground voltages using top side of chip package substrate

Preliminary Class

361

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

UNITED STATES PATENT APPLICATION

FOR

DELIVERING HIGH-CURRENT POWER AND GROUND VOLTAGES USING TOP SIDE OF CHIP PACKAGE SUBSTRATE

INVENTORS:

Sergio Camerlo, a citizen of the United States of America Yida Zou, a citizen of China Luca Cafiero, a citizen of Italy Gary L. Myers, a citizen of the United States of America Bobby Parizi, a citizen of the United States of America Hsing-Sheng Liang, a citizen of Taiwan

ASSIGNED TO:

Cisco Technology, Inc. a California Corporation

PREPARED BY:

THELEN, REID, & PRIEST P.O. BOX 640640 SAN JOSE, CA 95164-0640 TELEPHONE: (408) 292-5800 FAX: (408) 287-8040

Attorney Docket Number: CISCO-6920

Client Docket Number: 6920

Docket No. CISCO-6920

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Sergio Camerlo et al.

SERIAL NO.:

10/614,905

FILING DATE:

July 7, 2003

TITLE:

Delivering High-Current Power and Ground Voltages Using Top Side of Chip

Package Substrate

EXAMINER:

Unassigned

ART UNIT:

2836

Certificate of Mailing

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP: Office of Initial Patent Examination, P.O. Box

Date: UGI 2004

1450 Alexandria, VA 223

xain

Beatrice Orozco

MAIL STOP: Office of Initial Patent Examination

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

PATENT PRACTITIONERS TO BE MADE OF RECORD PURSUANT TO 37 C.F.R. § 1.32(c)(3)

Please recognize the following <u>ten</u> patent practitioners in the attached Declaration and Power of Attorney as being of record in the application or patent to which the power of attorney is directed:

David B. Ritchie, Reg. No. 31,562 Marc S. Hanish, Reg. No. 42,626 John P. Schaub, Reg. No. 42,125 Thierry K. Lo, Reg. No. 49,097 Masako Ando, (37 C.F.R.§10.9 (b)) Robert E. Krebs, Reg. No. 25,885 Khaled Shami, Reg. No. 38,745 Steven J. Robbins, Reg. No. 40,299 Hal J. Bohner, Reg. No. 27,856 Adrienne Yeung, Reg. No. 44,000 The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1698.

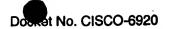
Respectfully submitted, THELEN REID & PRIEST LLP

Dated: November 4, 2004

David B. Ritchie Reg. No. 31,562

THELEN REID & PRIEST LLP P.O. Box 640640 San Jose, CA 95164-0640 Telephone: (408) 292-5800

Fax: (408) 287-8040



DECLARATION & POWER OF ATTORNEY

a below-named inventor, I hereby declare that:

My correct city and state of residence, my post office address and my citizenship are stated below next to my name.

I believe myself to be the original, first and sole inventor (if only one name is listed below) or an

		•	_	·						•	
original	and firs	t joint invent	or (if more t	than one nam	ne is listed b	elow) of th	ne subj	ect matt	er whicl	n is	
disclose	ed and o	laimed and t	for which a	patent is sou	ght on the in	vention e	ntitled:				
"Delive	ring Hi	gh-Current	Power and	Ground Vol	tages Using	Top Sid	e of C	hip Paci	kage Si	ubstrate"	
	The sp	ecification of	f this subjec	t matter:							
	x	is attached	hereto.			•			•		
		was filed or	n		;		•				
	٠.	was assign	ed serial No	D	;					•	
		which was	amended o	n			·				
my inve inventio sale in t has not applicat represe design p	ntion then the Unit been point in a ntatives patent a	ereof, or pate of or more the ed States of atented or more ountry for assigns rapplication) provided the cocordance w	ented or denan one year America moneyeade the subpreign to the more than to this additional to this additional to the disclusion of the first and the first	lose informat R. §1.56(a).	y printed pur application, year prior to yentor's certion es of Americ s (for a utility ion which is	that the soft this applificate issoft a on an a patent a	any contains a second contains which was a second contains a secon	as not ir and tha fore the on filed on) or si	public t the invidate of by me of x month	use or on vention this or my lega ns (for a	
patent o			to listed bal	enefits unde low and have late before th	i alen idantiti	ea below	anv io	eluli abi	リミレはいい	I IVI Palei	nt
PRIOR	FORE	GN APPLICA	ATION(S)						<u>Priori</u>	ity Claime	<u>d</u>
Number		Country		Month/Day	/Year Filed		Yes	No			_
Numbe	·	Country		Month/Day	/Year Filed	. <u>.</u>	Yes	No			_
Numbe	r	Country		Month/Day	/Year Filed		Yes	No		•	_



PROVISIONAL PATENT APPLICATION(S)

I hereby claim the ber listed below:	efit under 35 U.S.C. §119(e) of any United	States provisional application(s)
Application Number	Filing Date	-
Application Number	Filing Date	<u>.</u>

PARENT PATENT APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in these prior United States application(s) in the manner provided by 35 U.S.C. §112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. §1.56(a) which occurred between the filling date of the prior application(s) and the national or PCT international filing date of this application.

Application No.	Filing Date	Status (Issued, Pending, Abandoned)
Application No.	Filing Date	Status (Issued, Pending, Abandoned)
Application No.	Filing Date	Status (Issued, Pending, Abandoned)
Application No.	Filing Date	Status (Issued, Pending, Abandoned)

I hereby appoint David B. Ritchie, Registration No. 31,562; Robert E. Krebs, Registration No. 25,885; Marc S. Hanish, Registration No. 42,626; John P. Schaub, Registration No. 42,125; Adrienne Yeung, Registration No. 44,000; Steven J. Robbins, Registration No. 40,299; Thierry K. Lo, Registration No. 49,097; William Samuel Niece, Registration No.: 47,824; J. Davis Gilmer, Registration No. 44,711; William E. Winters, Registration No. 42,232, Masako Ando, (37 C.F.R.§10.9 (b)); and John Klaas Uilkema, Registration No. 20,282; Becky L. Troutman, Registration No. 36,703; Hal J. Bohner, Registration No. 27,856; as attorneys of record with full power of substitution and revocation, to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith. If this application is assigned by me I agree and understand that the above-named attorneys will represent the assignee and not me.

Please send all correspondence and direct all telephone calls to:

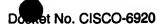
David B. Ritchie
Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
Telephone: (408) 292-5800
Facsimile: (408) 287-8040

I, the undersigned, declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

FULL NAME OF	FIRST Name	MIDDLE Initial(s)	LAST Name	.yo
INVENTOR 1	Occasio		Camerlo	•
RESIDENCE AN	Sergio ND City	State or Foreign Country		zenship
	Cupertino	California	United States	of America
POST OFFICE ADDRESS	Number and Street	City	State or Country	Zip Code
	22996 Standing Oak Court	Cupertino	California	95014
FULL NAME OF	FIRST Name	MIDDLE Initial(s)	LAST Name	· ·
INVERTION 2	Yida		Zou	
RESIDENCE AN CITIZENSHIP	D City	State or Foreign Country	Country of Citi	zenship
	San Jose	California	China	
POST OFFICE ADDRESS	Number and Street	City	State or Country	Zip Code
·	4355 Renaissance Drive, #220	San Jose	California	95134
FULL NAME OF INVENTOR 3		MIDDLE initial(s)	LAST Name Cafiero	
RESIDENCE AN	<u>Luca</u> D City	State or Foreign Country	Country of Citiz	zenship
CITIZENSHIP		,		
	Palo Alto	California	Italy	
POST OFFICE ADDRESS	Number and Street	City	State or Country	Zip Code
	1731 Fulton Street	Palo Alto	California	94303
				•
FULL NAME OF INVENTOR 4	FIRST Name	MIDDLE initial(s)	LAST Name	
	Gary	<u>L</u>	Myers	
RESIDENCE AN CITIZENSHIP	D City	State or Foreign Country	Country of Citiz	zenship
	San Ramon	California	United States	
POST OFFICE ADDRESS	Number and Street	City	State or Country	Zip Code
	709 Jadecrest Court	San Ramon	California	94583
	103 dadoordot Court			

Doc No. CISCO-6920

Bobby State or Foreign Country Country of Citizenship San Jose California United States of America POST OFFICE Number and Street City State or Country Zip Code ADDRESS 5003 Amondo Drive San Jose California 95129 FULL NAME OF FIRST Name MIDDLE Initial(e) LAST Name INVENTOR 6 Hsing-Sheng Liang RESIDENCE AND City State or Foreign Country Country of Citizenship CITIZENSHIP San Jose California Taiwan POST OFFICE Number and Street City State or Country Zip Code ADDRESS 1431 Saratoga Avenue, #116 San Jose Celifornia 95129 I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 2 Date Signature of Inventor 2 Date Signature of Inventor 4 Date	FULL NAME OF	FIRST Name	MIDDLE Initial(s)	LAST Name	
San Jose California United States of America	INVENTOR 5	Babbu		Parizi	
POST OFFICE Number and Street ADDRESS South			State or Foreign Country		izenship
POST OFFICE Number and Street ADDRESS South		Can loss	California	United States	s of America
FULL NAME OF FIRST Name MIDDLE Initial(s) RESIDENCE AND City State or Foreign Country Country of Citizenship CITIZENSHIP San Jose California Taiwan POST OFFICE Number and Street City State or Country Zip Code ADDRESS 1431 Saratoga Avenue, #116 San Jose California 95129 I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Washington All San Jose Date Washington All San Jose Date Many Shaper 11/03					
FULL NAME OF FIRST Name INVENTOR 6 Hsing-Sheng RESIDENCE AND City State or Foreign Country Country of Citizenship CITIZENSHIP San Jose California Taiwan POST OFFICE Number and Street City State or Country Zip Code ADDRESS I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Hall Saratoga Avenue, #116 San Jose Signature of Inventor 1 Date Hall Saratoga Avenue January Jan		5003 Amondo Drive	San Jose	California	95129
RESIDENCE AND City State or Foreign Country Country of Citizenship San Jose California Taiwan POST OFFICE Number and Street City State or Country Zip Code ADDRESS I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Date					,
Hsing-Sheng RESIDENCE AND City State or Foreign Country Country of Citizenship San Jose California Taiwan POST OFFICE Number and Street City State or Country Zip Code ADDRESS I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Date Date Date		FIRST Name	MIDDLE Initial(s)	LAST Name	
San Jose San Jose California Taiwan POST OFFICE Number and Street ADDRESS I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful talse statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Date Date Date	INVENTOR 6	Hsing-Sheng			
POST OFFICE Number and Street City State or Country Zip Code 1431 Saratoga Avenue, #116 San Jose California 95129 I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 2 Date Was Allysis 1/163	RESIDENCE AN CITIZENSHIP	D City	State or Foreign Country	Country of Ci	uzensnip
POST OFFICE Number and Street 1431 Saratoga Avenue, #116 San Jose California 95129 I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Date Date Date Date Date		San Jose	California		·
I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Date Date Date Date				State or Country	Zip Code
I further declare that all statements made herein of my own knowledge are true and that all statements made upon information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. Signature of Inventor 1 Date Hay Myss 1/103	·	1431 Saratoga Avenue, #116	San Jose	California	95129
Signature of Inventor 1 Date Signature of Inventor 2 Date	made upon inform knowledge that was Section 1001 of 3	nation and belief are believed to be rillful false statements and the like s Fitle 18 of the United States Code, a	true; and turtner that these	ine or imprisonment. Of	both, under
Signature of Inventor 1 Date Signature of Inventor 2 Date Date Date Date Date Date Date Date	of the application	or any patent issuing thereon.		<i>?</i>	4
Signature of inventor 1 Muccolcula Day & Myer 1/103	Gulo	Ll 6/30/2	•) /	119	6/30/200
Tyl Co Doto	Signature of Inve	ntor 1 Date	Signature of Inve		
Signature of Inventor 3 Date Signature of Inventor 4 Date	hice	Perli -	Hay ?		
	Signature of Inver	Date	Signature of Inve	entor 4	Date
7//3 ASN-Shapel 7/1/Q3 Date Signature of Inventor 6 Date	SA	7/1/0	13 ASM-S	hatel	<u></u>



37 C.F.R. §1.56 Duty to disclose information material to patentability

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1,97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) Prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
 - It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the Office, or
- (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

- (c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:
 - (1) Each inventor named in the application;
 - (2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.